



SETUP & INSTALLATION MANUAL
FOR
CAT308D CR EXCAVATOR
BY



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Ports/Bearings Fitting and Lubrication Charts

Output Port No.	Feeds Valve No.	SPL10K Primary Divider Valve
Port 1	2	To SPL08 Divider Valve
Port 2	5	To SPL06 Divider Valve
Port 3	4	To SPL06 Divider Valve
Port 6	3	To SPL06 Divider Valve
Port 10	1	To SPL08 Divider Valve

Output Port No.	Feeds Bearing No.	SPL08 Secondary Divider Valve (Valve 2)
Port 1	17	To Front Slew Bearing
Port 2	16	To Back Slew Bearing
Port 3	18	To Ram Bearing
Port 4	15	To Lift Ram Bearing
Port 5	19	To Inner Slew Bearing
Port 6	14	To Lift Ram Bearing
Port 7	20	To Offset Slew Ram
Port 8	13	To Lift Ram Bearing Top

Output Port No.	Feeds Bearing No.	SPL06 Secondary Divider Valve (Valve 5)
Port 1	10	To Bucket Pin Top Left
Port 2	9	To H Frame (Bucket Linkage) Pin
Port 3	11	To H Frame Ram Bottom Pin
Port 5	12	To Bucket Pin Top Right

Output Port No.	Feeds Bearing No.	SPL06 Secondary Divider Valve (Valve 4)
Port 1	22	To Dipper Stick Main Bucket Pin
Port 2	21	To Dipper Stick Arm Linkage Pin

Output Port No.	Feeds Bearing No.	SPL06 Secondary Divider Valve (Valve 3)
Port 1	7	To Dipper To Boom Ram Top Bearing
Port 2	6	To Dipper To Boom (Knuckle) Main Pin
Port 3	8	To Dipper To Boom (Knuckle) Main Pin
Port 6	5	To Dipper To Boom Ram Top Bearing

Output Port No.	Feeds Bearing No.	SPL08 Secondary Divider Valve (Valve 1)
Port 1	3	To Main Boom Pin
Port 2	2	To Main Boom Bearing
Port 6	1	To Main Boom Bearing
Port 7	4	To Dipper To Boom Ram Bottom Point

Note:

1. **Caution:-**

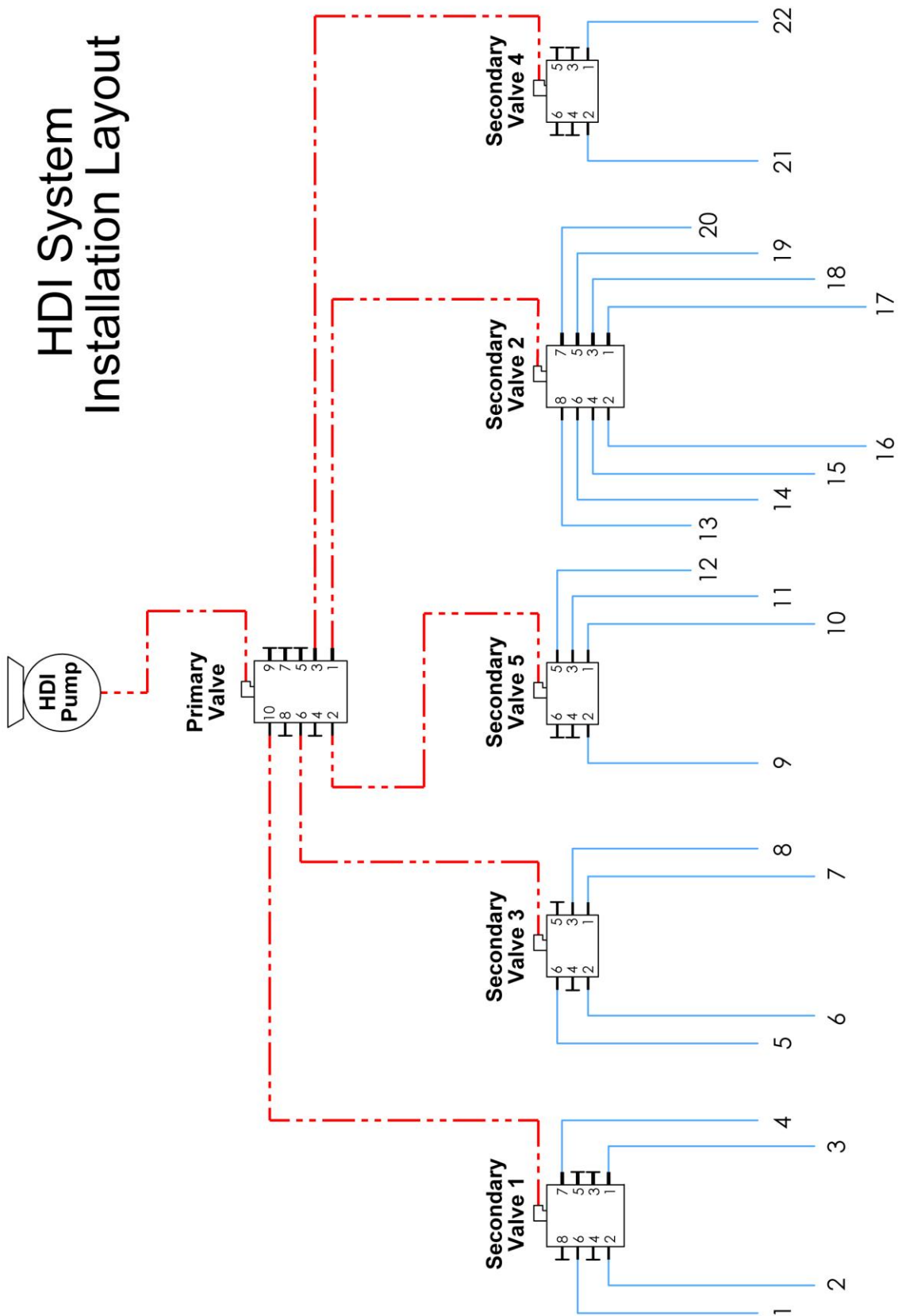
Switch off the vehicle engine and remove the ignition key before starting work on the machine installation. This will prevent accidents occurring on site.

2. Before commencing installation of this lubrication system, it is important that the owner/operator ensures that all the bearings are pre-filled with the correct lubricant.

3. It is important to use recommended grease for the vehicle. DO NOT mix different types of grease together in Pump System. Keep them separate.

(**Acknowledge:** Grade 2 grease is recommended for use in HDI Pump)

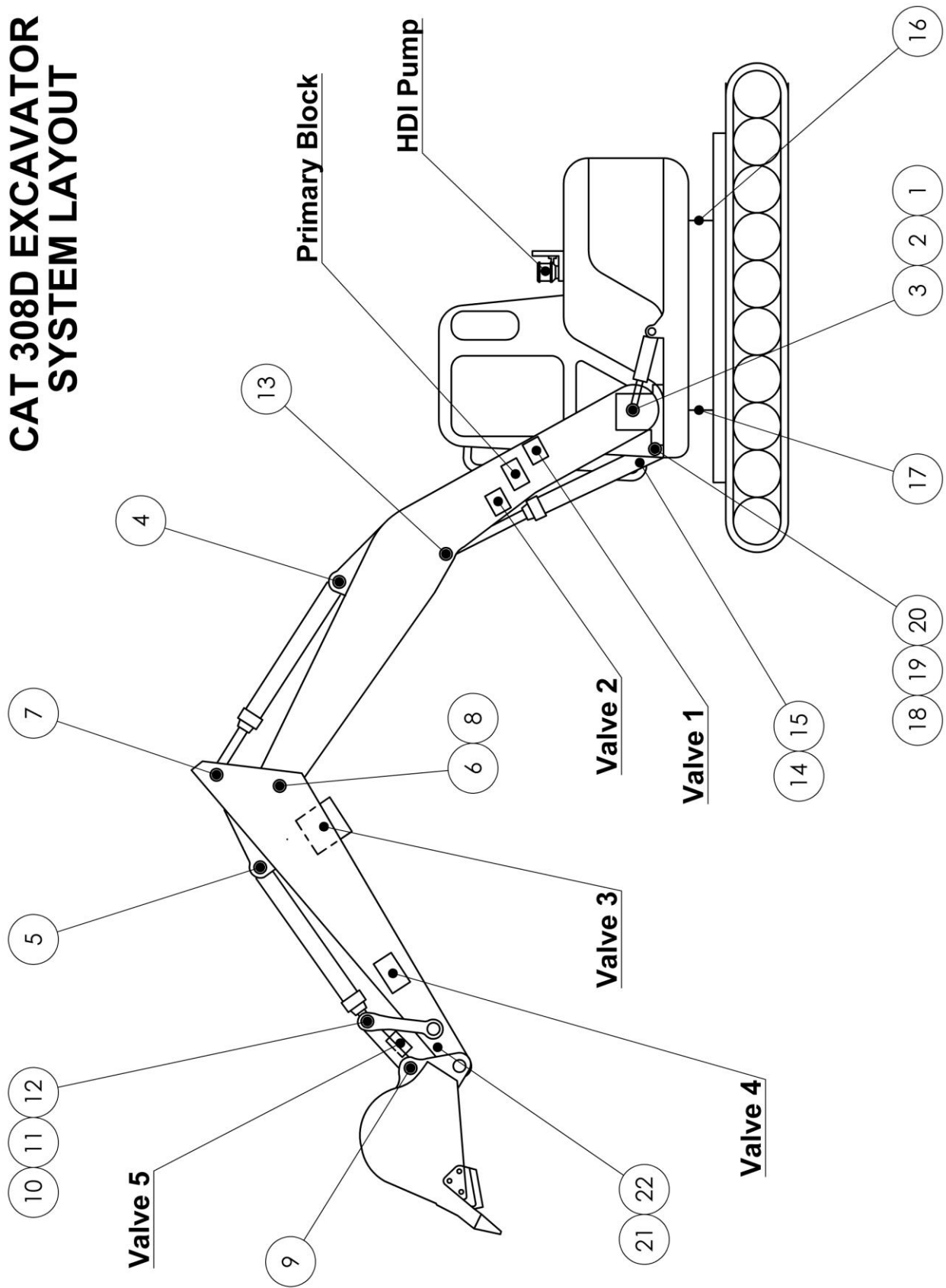
HDI System Installation Layout



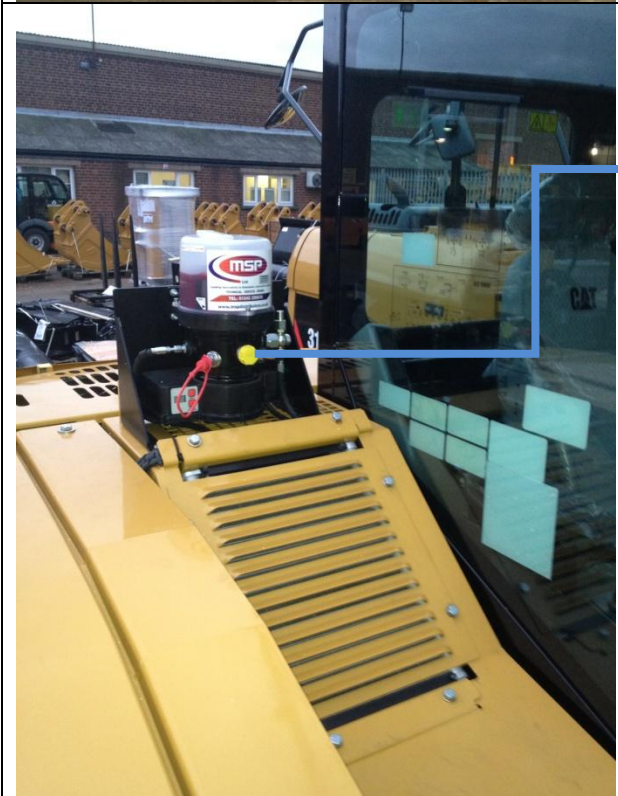
LIST OF ABBREVIATIONS

HDI Pump	: 24Vdc HDI Pump
PB	: SPL10K Primary Valve
Valve 1	: SPL08 Secondary Valve #1
Valve 2	: SPL08 Secondary Valve #2
Valve 3	: SPL06 Secondary Valve #1
Valve 4	: SPL06 Secondary Valve #2
Valve 5	: SPL06 Secondary Valve #3
	: Output To Secondary Divider Valves
	: Output Grease Flow Line
1	: Vehicle Bearing Point

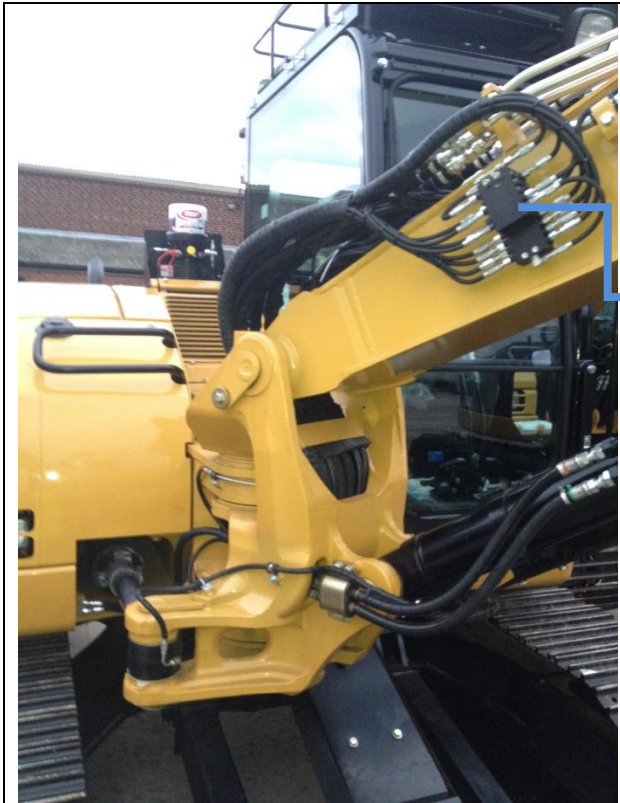
CAT 308D EXCAVATOR SYSTEM LAYOUT



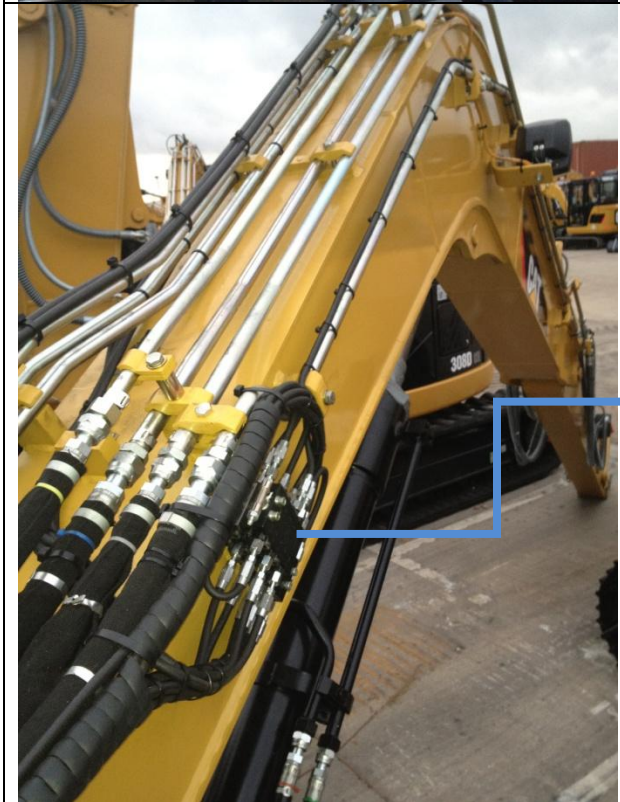
System Installation Guide

	• Location of 24Vdc HDI Pump being placed on top right hand side of CAT 308 vehicle. • View from the back of the vehicle.
	• View from the side of the vehicle. • Note that:- ✓ HDI 3 Litres electric pump mounted on CAT 308D pump bracket. See HDI Set up Information (ISF 294 Issue 12/09 for wiring and programming details)

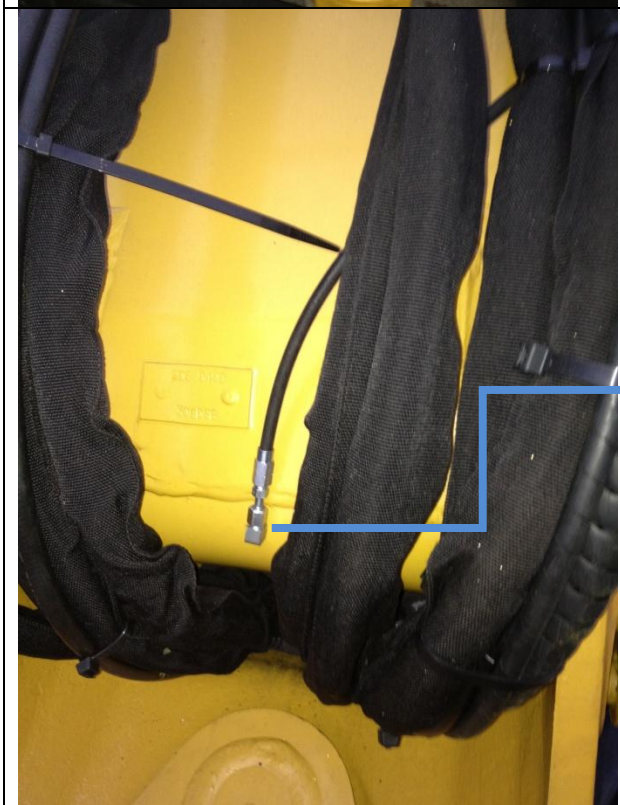
	• Location of Pump override switch (Green Button) has been placed next to the driver seat. • Note that:- ✓ To operate override switch, press button for approximately 5 seconds. ✓ When pump operates, the light will be ON.
	• Component detail view below the vehicle key.

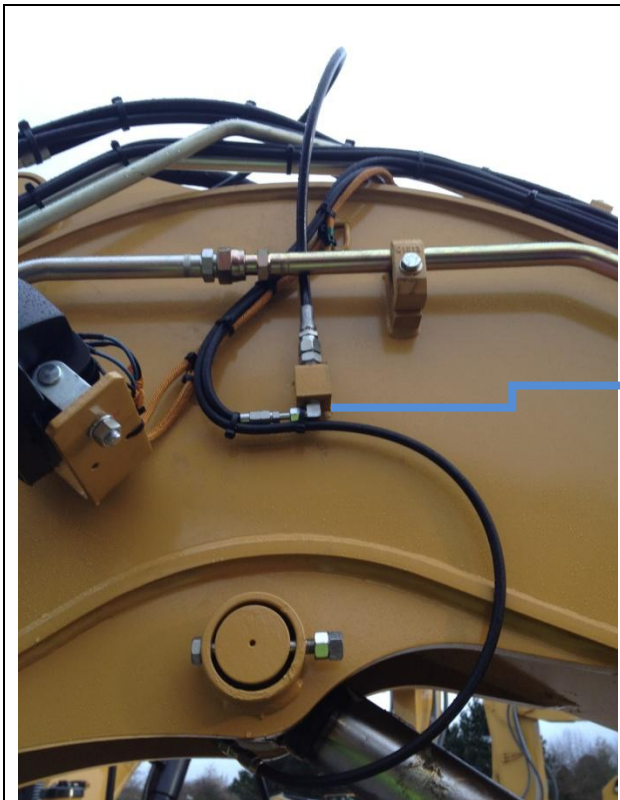
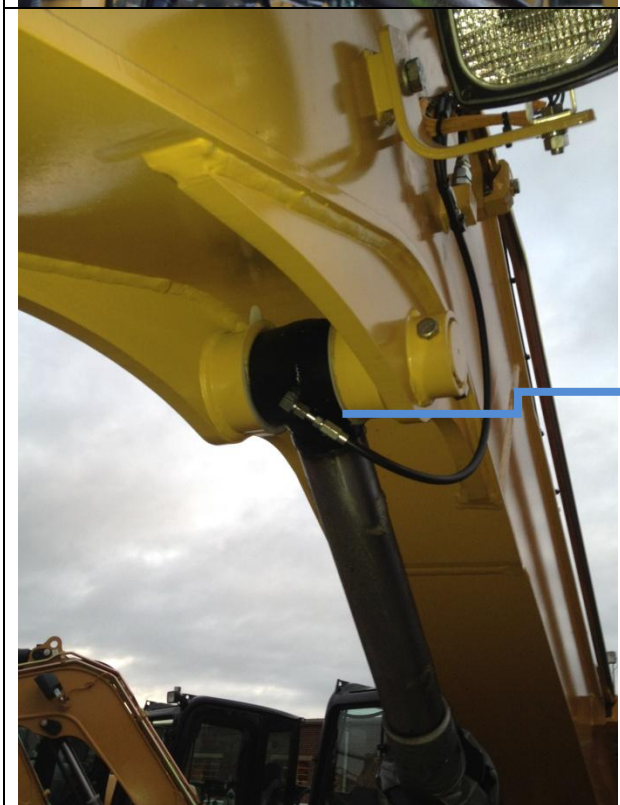


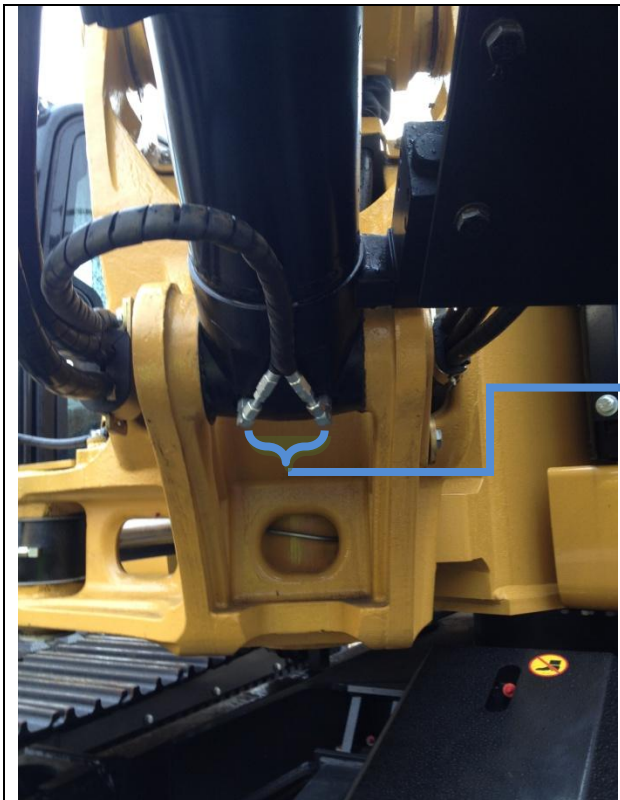
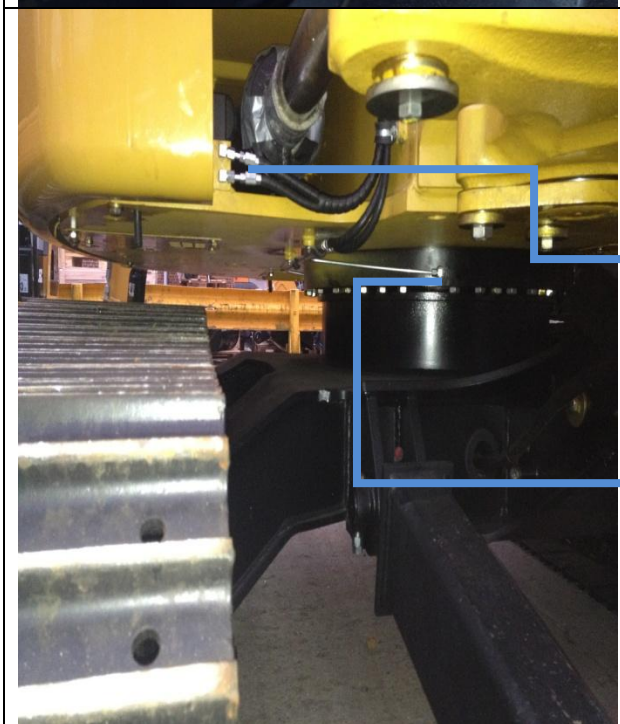
- Mounting positions of:
 - 10-Ways Primary Valve (Top),
 - 8-Ways Valve 1 (Bottom Top)
 - 8-Ways Valve 2 (Bottom Lower)
- at Caterpillar Boom Arm.



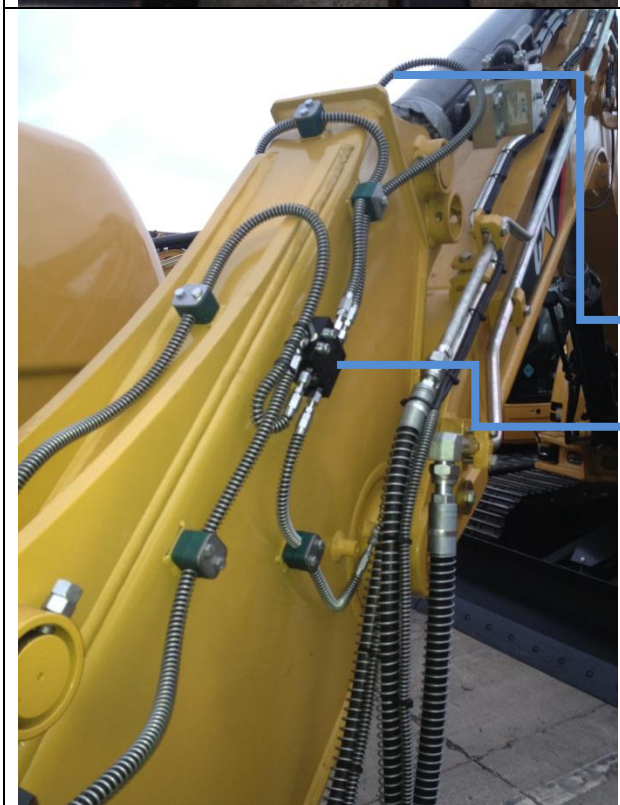
- Side angle view of the mounting Valves.

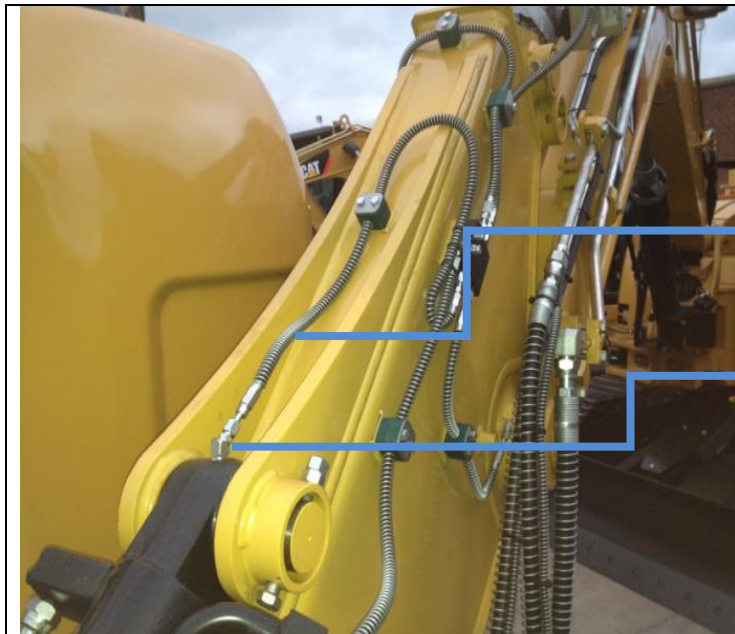
 A close-up photograph of a yellow excavator arm joint. A blue bracket on the left side of the joint indicates two specific lubrication points. Two blue arrows originate from this bracket: one points to the right towards the text 'Lubricant delivered from 8-Ways Valve 1:', and the other points downwards towards the text 'Bearing point 1' and 'Bearing point 2'.	• Lubricant delivered from 8-Ways Valve 1: ▪ Bearing point 1 ▪ Bearing point 2
 A close-up photograph of a yellow excavator arm joint, showing a different section than the top image. A blue arrow points from the right towards the text 'Bearing point 3 lubricated From Valve 1.', indicating the location of the third lubrication point.	• Bearing point 3 lubricated From Valve 1.

	• Bearing point 4 lubricated From Valve 1.
	• Bearing point 13 lubricated From Valve 2.

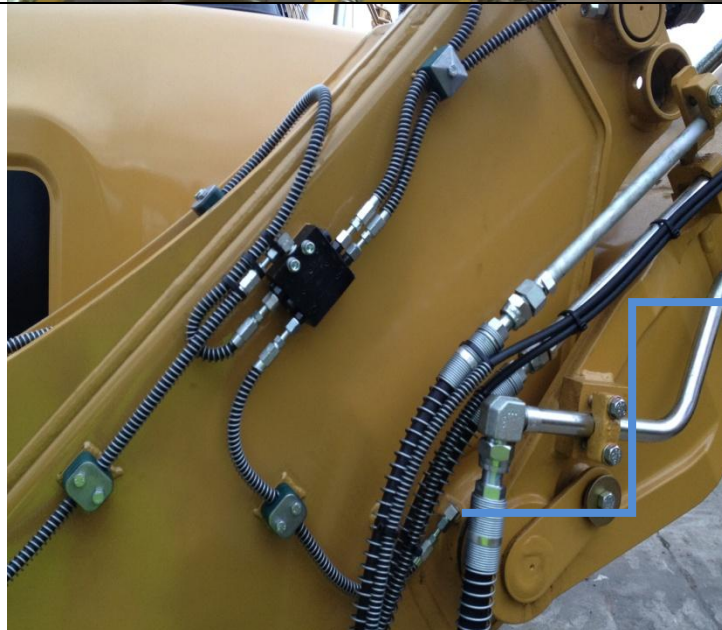
	Both bearing points of 14 & 15 lubricated from Valve 2.
	<u>Top section:</u> - Bearing point 19 & 20 lubricated from Valve 2. <u>Bottom Section:</u> - Bearing point 16 & 17 lubricated from Valve 2.

	• Bearing point 16 lubricated From Valve 2.
	• Bearing point 17 lubricated From Valve 2.

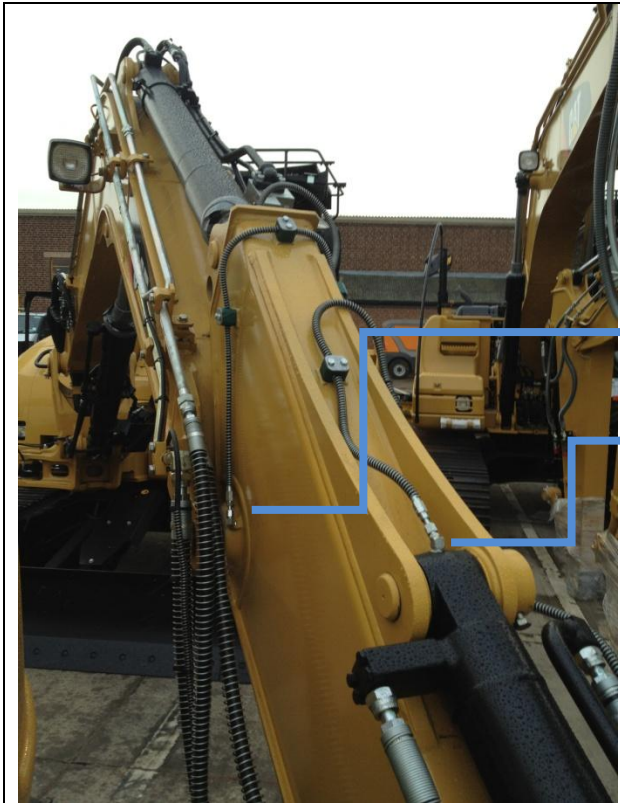
	• Bearing points 18 lubricated From Valve 2.
	• Bearing point 7 lubricated From Valve 3. • Mounting position of Valve 3 (6-Ways Valve) at Caterpillar top Right Dipper Stick.



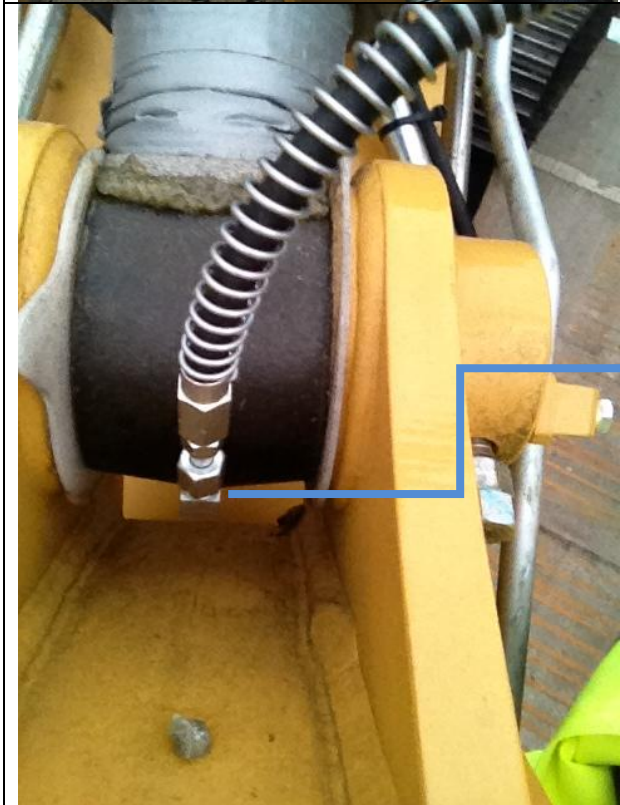
- 8 mm “High Pressure Pipe” (Being used on most of the fitting).
- Bearing point 5 lubricated from Valve 3.



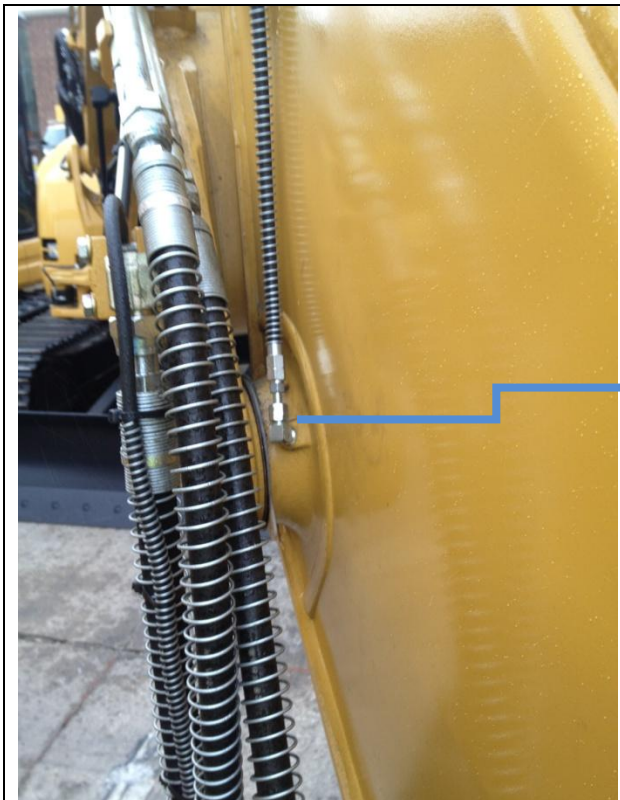
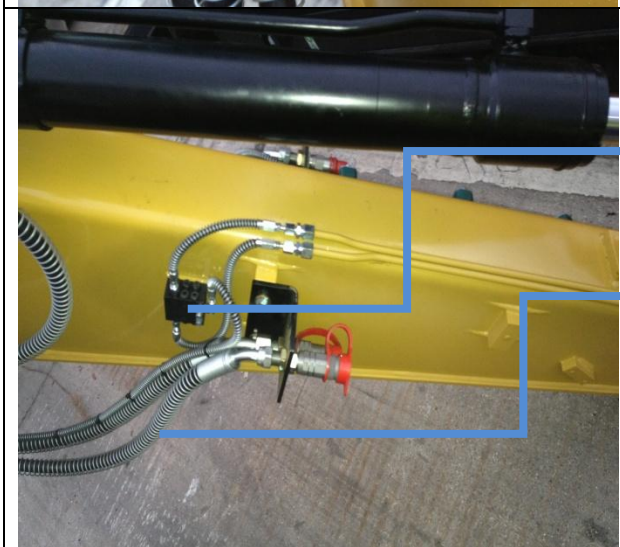
- Bearing point 6 lubricated From Valve 3.



- Bearing point 8 lubricated From Valve 3.
- Bearing point 5 lubricated From Valve 3.



- Bearing point 7 lubricated From Valve 3. (Top detail view).

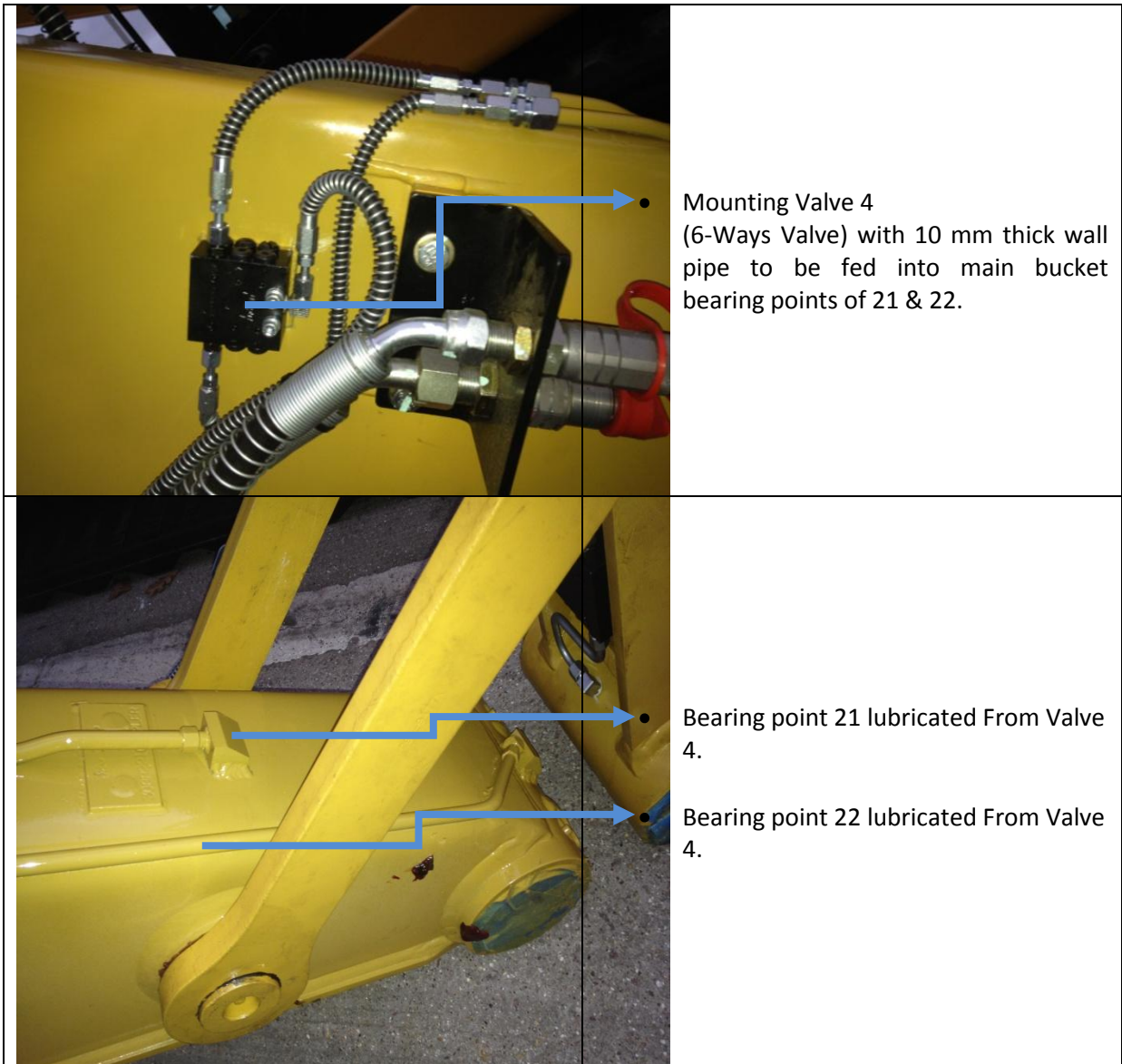
	• Bearing point 8 lubricated From Valve 3.
	• Mounting position of Valve 4 (6-Ways Valve) located at Caterpillar bottom left Stick. • "Steel Helix" used to protect the high pressure rubber hose.

Installation below shows the main bucket pin and H-frame linkage pin bearings drilled and EXT-1 blocks fitted.

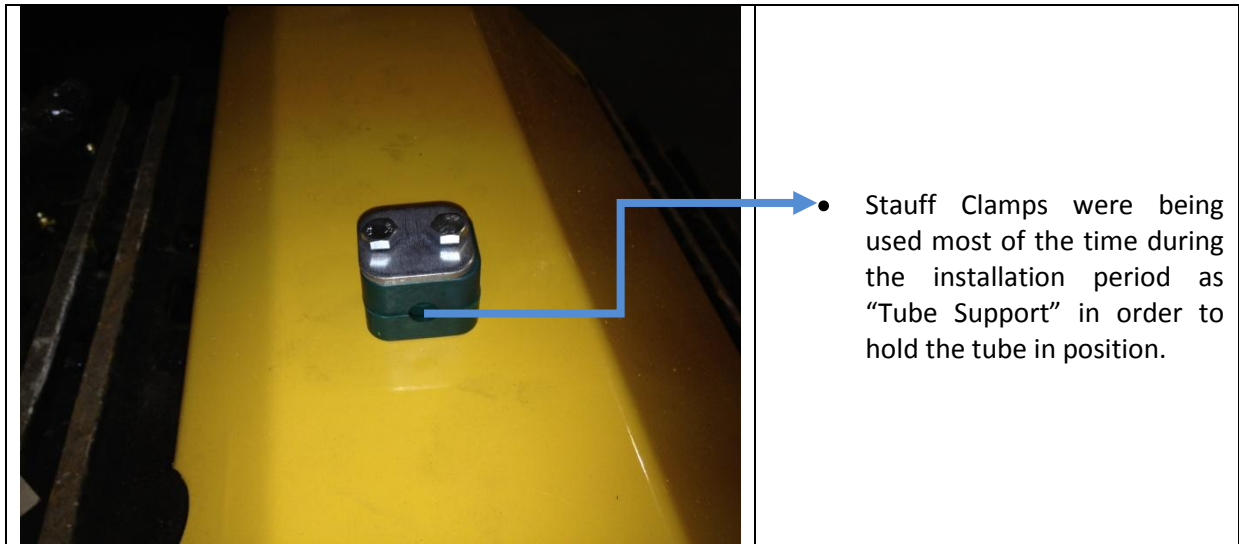
For details on how to do this, see IM 004 manual.

For installation without drilling these bearings, contact Interlube Systems Ltd. for details.

	• 10mm thick wall pipe is required for "Main Bucket Pin".
	• 10 mm thick wall pipe before being painted



	• 6 mm steel pipe. • Mounting Valve 5 (6-Ways Valve) at the "H-frame". • 8 mm "High Pressure Pipe".
	• Bearing point 10 lubricated from Valve 5. • Bearing point 12 lubricated from Valve 5. • Bearing point 11 lubricated from Valve 5. • Bearing point 9 lubricated from Valve 5.



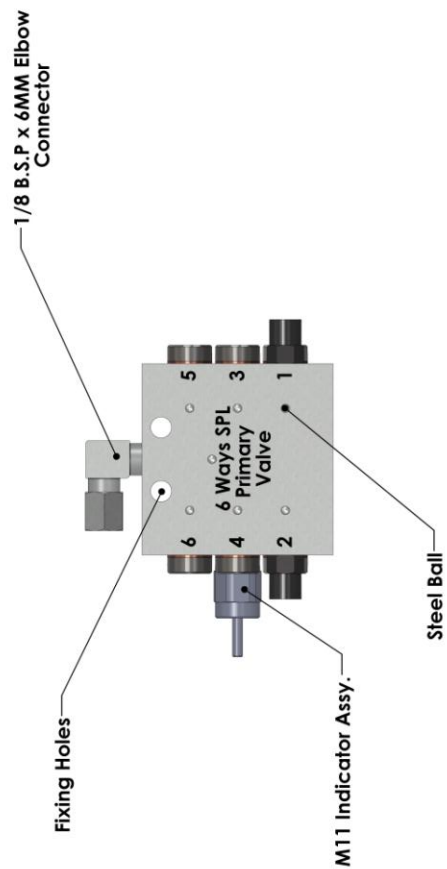
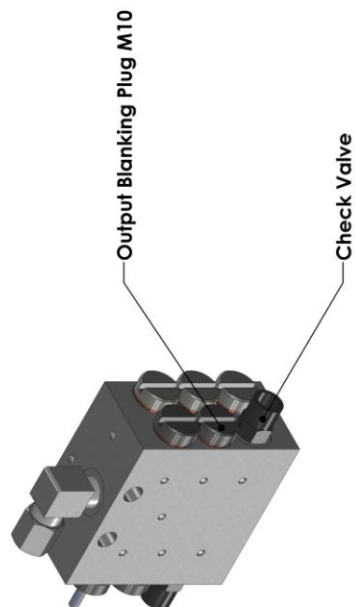
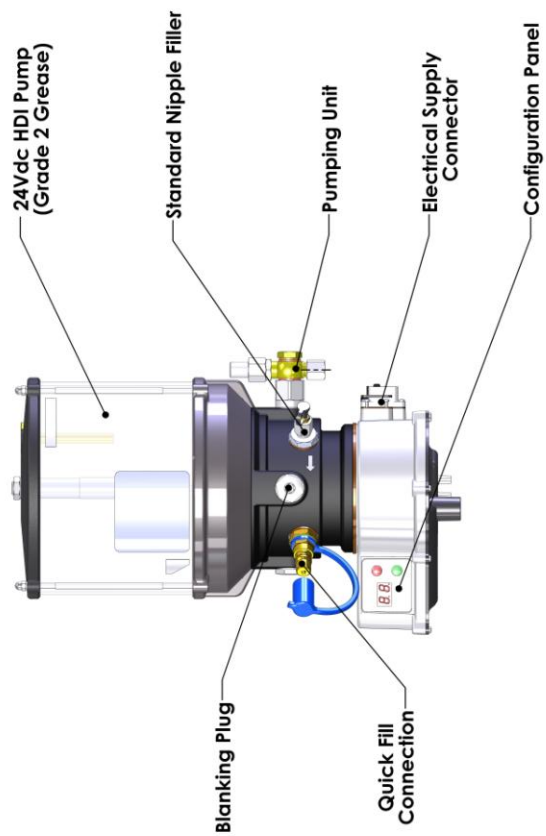
Note:

As a guide on these typical applications, it is advisable that the pump default run time to be set to 5 minutes. Each individual installations/applications may require specific settings. We recommend that new applications be initially monitored to ensure adequate lubrication of all bearings on the system being supplied.

Bill of Materials

No.	Part No.	Description	Qty.
1	HDI 3201P	HDI Pump with Moulded Reservoir (1 Element/PRV)	1
2	CAT 308 Pump Bracket	CAT 308 Pump Bracket	1
3	HDI-PB-24	24V Push Button (Green)	1
4	ELECTRICAL SWA 28RFP	Pushbutton connectors (SWA 28RFP)	4
5	HDI-13321-1	Splash proof Fuse Holder	1
6	FU2 5AMP	5 Amp Blade Fuse	1
7	SPL10K	Primary Divider Valve with Indicator Pin 10 outlet	1
8	SPL06	Divider Valve 6 outlet	3
9	SPL08	Divider Valve 8 outlet	2
10	HP 1/8 BSP GREASE NIPPLE	HP Grease Nipple (1/8")	1
11	HP TEE 1/8 BSP MMF PTFE TOP	HP Tee : 1/8"bsp m/m/f hp	1
12	SPL-BP6	SPL06 Weld Plate	3
13	SPL-BP8	SPL08 Weld plate	2
14	SPL-CV-LL	6mm OD Check valve (for divider valves/Valves)	23
15	SPL-CN-6-LL	6mm OD Compression Nut for Check valve	27
16	SPL-OL-6-LL	6mm OD Steel Olives (for the SPL Check Valves)	27
17	SPL-CP-10	SPL Divider Valve Blanking Plugs	13
18	CF6-1-1/8	6mm OD x 1/8" BSP(M) Standard Connector	4
19	CFU-6-6	6mm OD x 6mm OD Equal Connector	2
20	CF6-2-1/8	6mm OD x 1/8" BSP (M) Elbow Connector	15
21	CF6-1-1/4	6mm OD x 1/4" BSP (M) Standard Connector	2
22	EXT-1/8-1	1/8" BSP- M x F Short Extension (23mm)	3
23	CFU-6-10	10mm OD x 6mm OD Standard	4
24	EXT-020029	1/8" BSP(F) x 1/8" BSP(M) Long 90 Adapter	1
25	EXT-20028	1/8" BSP(F) x 1/8" BSP(M) 45 Deg Adapter	2
26	TML-8.6-FE	HP Sleeve (8.6mm Pipe)	48
27	TML-8.6-ST	HP Stud (8.6mm Pipe)	48
28	TML-8.6-2.3F	HP Hose 8.6mm OD (grease filled)	50
29	TW-S	Cable Ties Small	300
30	HLX-P-12	Plastic Helix (12mm)- 25m coil	25

No.	Part No.	Description	Qty.
31	HLX-S-10	Steel Helix (small)	10
32	HLX-S-20	Steel Helix (Medium)	2
33	-	6mm Spring Washer (flat profile)	28
34	M10 X 6MM WASHERS	Penny Washer (6mm bore)	4
35	BOLTM6X10MM	M6 Socket Head (12mm)	4
36	BOLTM6X40	M6 Socket Head (40mm)	6
37	BOLTM6X70	M6 Socket Head (70mm)	2
38	AB1	1 Way Anchor Valve 1/8" BSP Steel Plated	1
39	EXCT 1	Welding Valve - 90 degree 1/8" BSP	2
40	TACKVALVE	Threaded Weld Valve (M6 Thread)	10
41	SC-9.5-S	Stauff Clamp 9.5mm Single	10
42	PC-6-10	P Clip - 6mm	2
43	PC-13-10	P Clip - 13mm	2
44	STP-6-1	6mm OD Steel Bundy Pipe	8
45	STP-10-3.5	Thick wall Steel Tube	4



Components
Layout
Description